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#### Busycon coarctatum Sowerby

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For the past 100 years *Busycon coarctatum* Sowerby has been considered a "lost" or even an extinct species. This in spite of a very excellent colored figure of a live specimen by Petit de la Saussaye.

Through the kindness of Mrs. Hugh Branham of Fort Myers Beach, Florida, we have received two fine specimens of this species. These specimens, and others in the National Museum, were obtained by the shrimp fishermen off the coast of Yucatan, Mexico, on the Campeche Bank which extends north into the Gulf of Mexico from the Yucatan peninsula.

In the year 1825, George B. Sowerby published a catalogue of the shells contained in the collection of the Earl of Tankerville. This was a list of all the species, some 2500, which were to be sold to settle the estate of the late Earl. In addition to the list of known species, Sowerby described nearly 100 new species, only a few of which were figured. Unfortunately *Busycon coarctatum* was one of the unfigured species. Just how the Earl of Tankerville obtained this rare shell is not known. No locality was given.

In 1852, Petit de la Saussaye published a note on two additional specimens, one in his own collection which he figured and one contained in the collection of Largilliert. It is quite possible that both specimens came originally from Largilliert, as he was in Central America about 1842 and made extensive collections during his trip which included the Peninsula of Yucatan. It is quite apparent from their notes that neither Tryon nor Dall ever saw specimens of this species and Johnson believed it to be extinct.

During the past winter there has been extensive fishing for shrimp on the Campeche Bank in the Gulf of Mexico by American fishermen. These boats put into Gulf coast ports to sell their cargo and replenish supplies. Interest on the part of enthusiastic shell collectors has stimulated these fishermen to bring in and sell the shells that come up in their trawls. Thus, this present species was obtained along with many other rare and interesting specimens.

The Tankerville Catalogue is a very rare publication, and as a consequence we include a copy of the original description of Sowerby at the end of this report.

### Busycon coarctatum Sowerby Plate 50

*Pyrula coarctata* Sowerby 1825, Catalogue of the Shells Contained in the Collection of the Late Earl of Tankerville, London, appendix p. XVII (locality not given).

*Pyrula coarctata* Sowerby, Petit de la Saussaye 1852, Journal de Conchyliologie **3**, pp. 145; 155–157, pl. 7, fig. 3 (Les Côtes de la Florida?).

Pyrula coarctata Sowerby 1880, Thesaurus Conchyliorum 4, Pyrula, p. 106, pl. 5, fig. 40 (Gulf of Mexico).

*Fulgur coarctatus* Sowerby, Tryon 1881, Manual of Conchology (1) **3**, p. 142, pl. 57, fig. 393 [copied from Petit de la Saussaye] (said to occur in Florida).

Fulgur perversa coarctata Sowerby, Dall 1889, Bulletin 37, United States National Museum, p. 112 (? West Florida).

Busycon coarctatum Sowerby, Johnson 1934, Proc. Boston Society Nat. Hist. **40**, no. 1, p. 126 (Gulf of Mexico "Sowerby").

Description. Shell dextral, imperforate, reaching at least 138 mm. ( $7\frac{1}{2}$  inches), rather solid, globose but with a much extended siphonal canal. Color consisting of axial stripes of dark mahogany-brown, irregular in both intensity of color and width of stripes. Whorls 6 to  $6\frac{1}{4}$ , strongly convex and having a supraperipheral ridge which supports a series of low blunt spines. Spire sub-depressed, obtuse, forming an angle of  $125^{\circ}$ . Aperture subovate, lengthened below into the long siphonal canal, colored a yellowish-brown within and ridged within with numerous and well developed spiral cords or ridges on the palatal side. These cords end a little below the sharp edge of the

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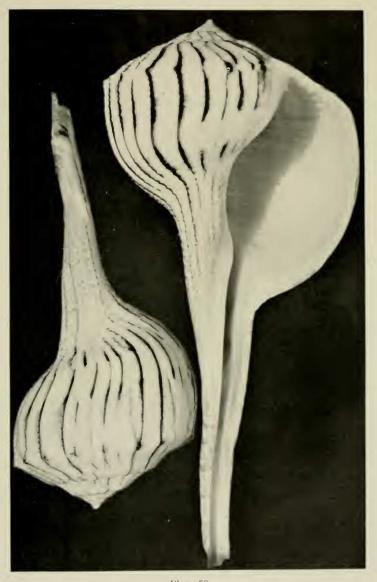


Plate 50 Busycon coarctatum Sowerby (natural size). Campeche Bank, Yucatan, Mexico.

outer lip. Parietal area thinly glazed. Columella twisted within, arched, thickened near the base of the aperture and extending below forming the parietal margin of the siphonal canal. Sculpture consisting of numerous and somewhat wavy spiral threads crossed by fine axial growth lines. There is a subperipheral area where the spiral threads and the axial color stripes are both weak. These spiral threads extend down on the siphonal canal where they appear to be somewhat stronger. Microsculpture consisting of exceedingly fine spiral threads. Nuclear whorls mammilliform, white and rather small. Operculum corneous, thickened and unguiculate.

Length	Width	Whorls	
138	71 mm.	$6\frac{1}{4}$	MCZ
117	53	6	MCZ
120	56	$6^{1}_{4}$	USNM
115	55	6	Branham Collection

*Types.* So far as now known, the original specimen described by Sowerby is lost. We suggest that the figure of Petit de la Saussaye (Jour. de Conchy. **3**, pl. 7, fig. 3) be accepted as the type figure to represent this species, and the type locality to be Campeche Bank, Yucatan, Mexico. One of three specimens in the National Museum possesses the specific data as follows: North Lat.  $21^{\circ}30'$ ; West Long.  $90^{\circ}20'$  in 16 fathoms, received from Mrs. Gladys Sennott.

*Remarks.* This species shows distant relationships to both *Busycon perversum* Linné and *B. pyrum* Dillwyn. To *B. perversum*, its relationship is indicated by a similar type of axial coloration, the possession of the fine spiral ridges, the subperipheral band and the internal ridges on the outer lip. The coloration and the outer and inner ridges are usually lost in adult specimens of *B. perversum*. *Busycon coarctatum* differs from *B. perversum* by being dextral and by having the whorls very globose and possessing the long and exceedingly narrow siphonal canal. In addition, the shoulder spines or knobs in *coarctatum* are usually much smaller. *B. pyrum* and *B. coarctatum* are related by the presence of the outer and inner ridges, and a somewhat similar type of axial coloration. They differ mainly in the area of the siphonal canal which is generally very broad in *B. pyrum* and very narrow in *coarctatum*.

The following is the original description of *Busycon coarctatum* Sowerby (A Catalogue of the Shells Contained in the Collection of the Late Earl of Tankerville, London, 1825, appendix, p. 17).

## "1629. PYRULA COARCTATA.

"P. testa pyriformi, transversè striata, albida, longitudinaliter strigis aurantiaco-brunneis ornata; anfractu ultimo ventricoso, ad basim subito coarctato, in canalem longam decurrente, supernè noduloso-carinato; spira depressiuscula, apice mammillari; apertura intus sulcata; columella obliquissimè uniplicata; long. 3.70 unc. lat. 1.85 unc.

"Obs. This elegant shell very nearly resembles the Pyrula Spirillus, Lam. in general form, the fold at the base of its columella is, however, much more oblique, and its mammillary point much smaller; it is, moreover, differently marked. A reverse specimen of the same species is numbered 1630."